AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings of the claims in the application:

1. (Currently amended) A system for delivery of a drug to a patient comprising:

a drug delivery device arranged to deliver a dose of the drug to the patient over a plurality of breaths, the device including a breath analyser which

(i) analyses a patient's breathing during drug delivery, wherein the analysis by the breath analyzer includes quantitatively measuring at least one parameter of the patient's breathing; and

(ii) generates breath information on a patient's breathing during drug delivery wherein the breath information includes the at least one quantitative measurement of the patient's breathing;

a data carrier onto which the drug delivery device is arranged to place the breath information for a number of ~~drug deliveries~~treatments;

a data analyser arranged to analyze the breath information from the data carrier, and to derive characteristics of the patient's breathing; and a trend generator ~~of~~for analyzing the breath information and the characteristics of the patient's breathing over a number of ~~drug deliveries~~treatments.

2. (Canceled)

3. (Original) A system according to claim 1, wherein the data analyser includes means for identifying non-compliant use of the drug delivery device.

3. (Canceled)

5. (Currently amended) A method of optimizing treatment from a drug delivery device which is arranged to deliver a <u>total</u> dose of the drug to the patient over a plurality of breaths comprising:

analyzing a patient's breathing during drug delivery, including quantitatively measuring at least one parameter of that breathing; generating breath information from the patient's breathing during drug delivery, including the quantitative measurements of that breathing;

transferring the breath information to a data analyzer;

deriving characteristics of the patient's breathing from the breath information; and

identifying non-complaint use of the drug delivery device; ~~and~~

analyzing the breath information and the characteristics of the patient's breathing over a number of ~~drug deliveries~~<u>treatments</u>.

6. (Currently amended) A method of identifying changes in condition of a patient over ~~time~~<u>a number</u> of treatments from a drug delivery device comprising:

analyzing a patient's breathing during drug delivery, including quantitatively measuring at least one parameter of that breathing; generating breath information from the patient's breathing during drug delivery, including the quantitative measurement of that breathing;

transferring the breath information to a data analyser;

deriving characteristics of the patient's breathing from the breath information; and

analyzing the characteristics of the patient's treatments over a number of ~~drug deliveries~~<u>treatments</u> to identify trends in those characteristics.

7. (Previously presented) The system for delivery of a drug to a patient according to claim 1, wherein the breath information includes inhalation time and a total number of pulses, and wherein the data analyser calculates a mean inhalation time value by dividing the total inhalation time by the total number of pulses.

8. (Previously presented) The system for delivery of a drug to a patient according to claim 1, wherein the breath information includes inhalation time and exhalation time and wherein the data analyser calculates an inhalation to exhalation ratio value by dividing the total inhalation time by the total exhalation time.

9. (Previously presented) The system for delivery of a drug to a patient according to claim 1, wherein the breath information includes a total treatment time, a total inhalation time and a total exhalation time, and wherein the data analyser calculates a total no flow time value by subtracting the total inhalation time and the total exhalation time from the total treatment time.

10. (Previously presented) The system for delivery of a drug to a patient according to claim 1, wherein the breath information includes a number of breaths per minute and a mean tidal volume, and wherein the data analyser calculates a minute volume value by dividing the number of breaths per minute by the mean tidal volume.

11. (Previously presented) The system for delivery of a drug to a patient according to ~~claim 10~~ claim 1, wherein the breath information further includes a mean inhalation flow and a mean inhalation time, and wherein the data analyser calculates a mean tidal volume value by multiplying the mean inhalation flow with the mean inhalation time with 0.7 and ~~divided~~ dividing by 60.

12. (Canceled)

13. (Withdrawn) The method according to claim 6, wherein the step of quantitatively measuring at least one parameter includes measuring an inhalation time and measuring a total number of pulses, and wherein the step of deriving characteristics of the

patient's breathing includes calculating a mean inhalation time value by dividing the total inhalation time by the total number of pulses.

14. (Withdrawn) The method according to claim 6, wherein the step of quantitatively measuring at least one parameter includes measuring an inhalation time and an exhalation time, and wherein the step of deriving characteristics of the patient's breathing includes calculating an inhalation to exhalation ratio value by dividing the total inhalation time by the total exhalation time.

15. (Withdrawn) The method according to claim 6, wherein the step of quantitatively measuring at least one parameter includes a total treatment time, a total inhalation time, and a total exhalation time, and wherein the step of deriving characteristics of the patient's breathing includes calculating a total no flow time value by subtracting the total inhalation time and the total exhalation time from the total treatment time.

16. (Withdrawn) The method according to claim 6, wherein the step of quantitatively measuring at least one parameter includes measuring a number of breaths per minute and a mean tidal volume, and wherein the step of deriving characteristics of the patient's breathing includes calculating a minute volume value by dividing the number of breaths per minute by the mean tidal volume.

17. (Withdrawn) The method according to ~~claim 16~~claim 6, wherein the step of quantitatively measuring at least one parameter further includes measuring a mean inhalation flow and a mean inhalation time, and wherein the step of deriving characteristics includes calculating a mean tidal volume value by multiplying the mean inhalation flow with the mean inhalation time with 0.7 and ~~divided~~dividing by 60.

18. (Withdrawn) The method according to claim 6, wherein the step of quantitatively measuring at least one parameter includes measuring an inhalation time and a total number of pulses, and wherein the step of deriving characteristics includes calculating a mean inhalation time value by dividing the total inhalation time by the total number of pulses.